Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1. (Currently Amended) A method for fabricating **a** an olfactory sensor on a substrate having a pair of electrodes, said method comprising:
- <u>a)</u> depositing <u>at least one</u> <u>a first layer of</u> conducting material <u>as a first layer</u> onto said substrate having a pair of electrodes; and
- <u>b)</u> depositing <u>at least one</u> <u>a second layer of non-conductive or insulating</u> polymer film <u>as a second layer</u> onto said first layer of conducting material thereby fabricating said sensor, <u>wherein said olfactory sensor is comprised of at least one sensor composition.</u>
- 2. (Original) The method according to claim 1, wherein said conducting material comprises carbon black.
- 3. (Original) The method according to claim 1, wherein said deposition of said conducting material is by aerosol spraying.
- 4. (Original) The method according to claim 2, further comprising drying said carbon black before deposition of said second layer.
- 5. (Original) The method according to claim 2, wherein said carbon black layer has a thickness between about 0.01 micron to about 10 microns.
- 6. (Original) The method according to claim 5, wherein said carbon black layer has a thickness between about 0.1 micron to about 1 micron.
- 7. (Original) The method according to claim 1, further comprising depositing said first layer of conducting material through a mask.

- 8. (Original) The method according to claim 7, wherein said mask comprises a plurality of apertures.
- 9. (Original) The method according to claim 1, wherein said deposition of said first layer of conducting material comprises robotic amateur.
- 10. (Original) The method according to claim 1, wherein said deposition of said second layer of said polymer film comprises robotic amateur.
- 11. (Original) The method according to claim 1, further comprising depositing said second layer of polymer film through a mask.
- 12. (Original) The method according to claim 11, wherein said mask comprises a plurality of apertures.
- 13. (Currently Amended) The method according to claim 1, further comprising post-processing said second layer of polymer film after depositing upon said first layer of conducting material.
- 14. (Currently Amended) The method according to claim 13, wherein said <u>post-processing</u> is <u>a member</u> selected from the group consisting of vacuum processing, photoactive polymerization and cross-linking.
- 15. (Currently Amended) The method according to claim 1, wherein said sensor is an array of sensors having a first sensor <u>composition</u> and a second sensor <u>composition</u>.
- 16. (Currently Amended) The method according to claim 15, wherein said first sensor is compositionally different than said second sensor composition.
- 17. (Currently Amended) The method according to claim 15, wherein said first sensor <u>composition</u> has a different polymer film layer than said second sensor <u>composition</u>.

- 18. (Original) The method according to claim 1, wherein said substrate comprises a dielectric material.
- 19. (Original) The method according to claim 1, wherein said substrate further comprises a member selected from the group consisting of a heater, a thermistor and a combination thereof.
- 20. (Original) The method according to claim 1, wherein said substrate further comprises a member selected from the group consisting of a temperature probe, humidity probe and a combination thereof.
- 21. (Currently Amended) A method for fabricating [[a]] an olfactory sensor on a substrate having a pair of electrodes, said method comprising:
- a) depositing a first layer of conducting material onto said substrate having a pair of electrodes to form a substrate having a conducting material disposed thereon;
- b) drying **processing** said substrate having a conducting material disposed thereon to remove any solvent;
- c) depositing a second layer of polymer film onto said first layer of conducting material to form a fabricated sensor; and
- d) post-processing said fabricated sensor to cure said second layer of polymer film.
- 22. (Original) The method according to claim 21, wherein said sensor is an array of sensors.